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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,848	08/09/2006	Fabian Doeling	P30088	7020

7055 7590 11/19/2008  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER
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WILSON, GREGORY A

ART UNIT	PAPER NUMBER
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3749

NOTIFICATION DATE	DELIVERY MODE
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11/19/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,848	<b>Applicant(s)</b> DOELING, FABIAN	
	<b>Examiner</b> Gregory A. Wilson	<b>Art Unit</b> 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 55-114 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 55-61, 68-71, 73-89, 96, 97, 99 and 101-114 is/are rejected.
- 7) ☒ Claim(s) 62-67, 72, 90-95, 98 and 100 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, filed 10/15/08, with respect to the rejection(s) of claim(s) 55-60 & 83-88 under Promonet et al (EP 0 607 720) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Link et al (5,076,891) and Tonon (5,326,252).

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the at least one rotary inlet must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 55-61, 68-71, 73-89, 96, 97, 99 and 101-114** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Link et al (5,076,891) in view of Tonon (5,326,252)**. Link et al discloses a heatable roller (2 & 3) used in the production and/or finishing of a continuous web of material such as paper web (SEE column 3, lines 17-20), including a non-rotatable core (4) and a casing (2 & 3) being rotatable around the non-rotatable core having a duct-filled annular region, Link et al furthermore discloses

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that the roller is heated from the interior surface, but does not include the teachings of the applicants invention of being coated with a catalyst. Link et al does however disclose (in column 3, lines 63-68) that “instead of providing interior heating via bracer elements, it is also possible to heat the interior of the roller shell by means of entirely separate heating devices....”. Tonon teaches a heating device in the form of a heatable roll (10) (SEE Figures 1 & 3) having a catalyst (11w) (SEE column 5, lines 10-14) which coats the inside surface of the tube heater (10) and is capable of combustion a gaseous fuel/oxidizer mixture applied to the inner wall to produce an exothermic reaction to generate heat to the outer surface (12) and thus acts as a catalytic burner (column 4, line 64 – column 5, line 2). The fuel can be a fuel gas and the oxidizer can be any fluid that will support combustion (column 1, lines 14-15). The outer tube (12) is in contact with the medium to be heated (in combination with Link et al, the said medium would be the paper web). The heat flow of the roller surface (12) is regulated/adjusted by fuel/oxidizer mixture ratio (which is inherently controlled by an undisclosed means) and flow rate. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have modified the heatable roller of Link et al by substituting the teaching of applying a catalyst to the inner surface of the roller for the purpose of generating an exothermic reaction with a fuel/oxidizer mixture as taught by Tonon for the heating elements (of Link et al) for the purpose of implementing a more efficient and more versatile heating system as is the benefit of Tonon, opening the door to the possibility of using renewable fuels. With

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regard to the rejected method claims, Link et al in view of Tonon, teaches a combination structure capable of carrying out the applicants claimed method.

With regards to claims 68 & 96, Tonon teaches a plurality of zones (SEE Figures 1 & 3) successively arranged in a direction of a roller axis, the zones do not all contain the catalytic coating and thus can partly be heatable independently of each other.

In re claims 74 & 102, since the fuel/air mass flow ratio can be set, an overstoichiometric combustion or combustion with a surplus of oxygen can inherently take place.

In re claim 110, Tonon suggests the applicants limitation of a control arrangement to zonally control at least one of fuel mass flow, fuel gas concentration in air, and roller temperature in column 3, lines 19-25.

### ***Allowable Subject Matter***

**Claims 62-67, 72, 90-95, 98 and 100** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. Wilson whose telephone number is (571)272-4882. The examiner can normally be reached on 7 am - 4:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory A. Wilson/  
Primary Examiner, Art Unit 3749  
November 11, 2008